

REMARKS

I. Introduction

The undersigned thanks Examiner Blizzard for his review and consideration of the present Application. In response to the Final Office Action mailed February 2, 2010, the undersigned submits the present amendment and remarks ("Response"). Upon entry of the Response, claims 1, 4, and 6-10 are pending in the application. The Response cancels claim 3. The Examiner has withdrawn claims 8-10 from consideration as directed to a non-elected invention. No new matter has been added by the Response. The Response is believed to overcome all of the prior Office Action rejections, and allowance of the pending claims is respectfully requested.

II. Rejections based on 35 U.S.C. § 112

The Office Action rejected claim 3 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Office Action states that claim 3 is indefinite because the phrase "in which the display device includes light transmission means disposed inside the shield" is unclear. Although Applicant respectfully disagrees with the rejection, claim 3 has been cancelled. These rejections are therefore moot and should be withdrawn.

III. Rejections based on 35 U.S.C. § 103

The Final Office Action rejected claims 1, 3, 4, and 5¹ under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,297,749 to Smith ("Smith") in view of U.S. Patent No. 6,567,220 to McDonald ("McDonald"). The Final Office Action rejected claims 6 and 7 under 35 U.S.C. § 103(a) as being unpatentable over Smith in view of U.S. Patent No. 6,675,800 to Keller ("Keller"). Applicant respectfully traverses these rejections and request reconsideration in light of the foregoing amendments and the following remarks, withdrawal of the rejections, and allowance of all pending claims.

A. Independent Claims 1 and 6

Claims 1 and 6 recite *inter alia* the following features:

- a display device adapted to enable a user whose face is covered by the shield to view information in the user's field of view;
- the display device being removably mounted on the outside of the shield; and
- a locking means adapted to temporarily fix the shield to a face mask for supplying breathing gas to an aircraft flight crew member.²

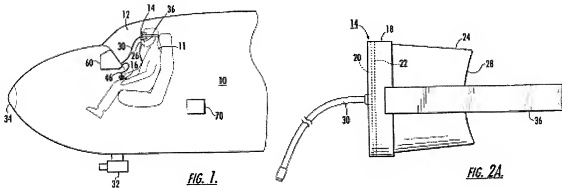
B. Smith

Smith teaches the use of a mask 14 having a body 18 with a display screen 20 mounted in an opening defined by the body 18 having a strap 36 connected to both sides of the body 18. The strap 36 is designed to extend around the back of the pilot's head or neck

¹ The Final Office Action included claim 5 in the rejection, although claim 5 was cancelled by the preceding October 7, 2009 Response.

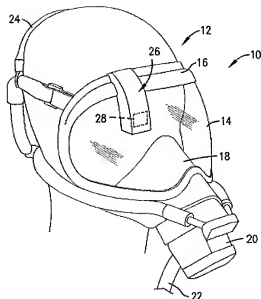
² This description is found in the preamble of claim 1 and in the body of claim 6.

to secure the mask 14 to the pilot's face. The mask 14 is designed to surround the pilot's eyes "without interfering with the aircraft's emergency oxygen mask 26 worn over the nose and mouth." Smith, col. 2, ll. 45-46. Hence, mask 14 is not fixed – temporarily or otherwise – to the oxygen mask 26. *See* Smith Figures 1 and 2A below.



C. McDonald

McDonald teaches a full-face mask 10 with a gas mask 18 to cover the nose and mouth of a wearer. The mask 10 also includes a display device 26 that is secured to the exterior surface of a seal 18 of the mask 10. McDonald also states that "conventional masks could readily be retrofitted with display devices." McDonald, col. 4, ll. 34-35. *See* McDonald Figure 1 below.



D. The 103 Rejections

The Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in view of the Supreme Court Decision in *KSR International Co. v. Teleflex*, 550 U.S. 398 (2007) explain what is required where an obviousness rejection is made:

As reiterated by the Supreme Court in *KSR*, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Obviousness is a question of law based on underlying factual inquiries. The factual inquiries enunciated by the Court are as follows:

(A) Ascertaining the differences between the claimed invention and the prior art;

(B) Ascertaining the differences between the claimed invention and the prior art; and

(C) Resolving the level of ordinary skill in the pertinent art.

Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. . . .

Office personnel fulfill the critical role of fact finder when resolving the *Graham* inquiries. . . . Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. . . .

Once the findings of fact are articulated, Office personnel must provide an explanation to support an obviousness rejection under 35 U.S.C 103.

MPEP § 2141 (II).

The Action failed to establish a *prima facie* obviousness case because (1) Smith teaches away from the claimed invention, (2) the combination renders Smith unsatisfactory for its intended purpose, and (3) a combination of the references does not replicate the claimed invention due to claim features not found in either of the references.

First, as discussed above, Smith teaches that the shield containing the display screen is designed not to interfere with the emergency oxygen mask. One of skill in the relevant art will understand from Smith that an emergency oxygen mask covering a pilot's nose and mouth therefore must not be hindered by a protective shield for the pilot's eyes. Moreover, Smith teaches that the shield with the display screen be secured via a strap that extends around the back of the pilot's head. Thus, one of skill in the relevant art will not understand from Smith that a protective shield could be temporarily coupled to the oxygen mask, as such a coupling would be viewed as interfering with the operation of the oxygen mask.

Second, modifying Smith so that the emergency oxygen mask includes a locking means for temporarily fixing a shield to the oxygen mask would render Smith unsatisfactory for its intended purpose. "If [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)." MPEP § 2143.01 (V). Smith teaches a mask that is intended to surround a pilot's eyes without interfering with the emergency oxygen mask. If the oxygen mask of

Smith were modified to include a locking means to temporarily fix a shield to the emergency oxygen mask, then Smith's oxygen mask would no longer function as intended because the shield would interfere with the oxygen mask. Hence, because modifying the oxygen mask to include a locking means to temporarily fix the shield to the mask would render Smith's shield and mask unsatisfactory for their intended use, the combination is not *prima facie* obvious, and it is only through the improper application of hind-sight reasoning that such an application would be used.

Third, even assuming *arguendo* that these references are properly combinable such that it would have been obvious to modify Smith and/or McDonald to include the recited features of the invention, nothing in any of Smith or McDonald, or any other relevant prior art of record, singly or in combination, teach or suggest the following recited features of independent claims 1 and 6:

- a display device being removably mounted on the outside of the shield;
- a locking means adapted to temporarily fix the shield to a face mask for supplying breathing gas to an aircraft flight crew member.³

The Office Action acknowledges that Smith does not explicitly teach or suggest a display device that is removably mounted to the outside of the shield. Applicant asserts that Smith also fails to teach or suggest a locking means for temporarily fixing the display device to an oxygen mask. Moreover, it would not have been obvious to one of skill in the relevant art to modify the mask of Smith to include the missing elements because Smith affirmatively

³ This description is found in the preamble of claim 1 and in the body of claim 6.

teaches away from the recited combination and the combination would render Smith's mask and shield unsatisfactory for their intended use. Thus, Smith does not teach each and every element of claims 1 and 6, and it would not have been obvious to modify Smith's mask to include the recited elements of independent claims 1 and 6.

McDonald does not supply the missing elements. As explained above, McDonald teaches that its display apparatus may be retrofitted onto existing masks. One of skill in the relevant art will understand this statement to mean that the display device can be added to older masks that did not previously have this feature. A later addition does not imply that the connection is temporary – rather, the term “retrofit” suggests that the display device is permanently added to these older masks. Therefore, McDonald does not teach each and every element of claims 1 and 6, and it would not have been obvious to modify McDonald's mask to include the recited elements of independent claims 1 and 6.

Furthermore, it does not appear that the Office Action considered the previous amendment of claim 6, which added the recitation of a removably mounted display device on the outside of the shield, because the Office Action states that Smith discloses all of the elements of claim 6, “except for the connection means being attached to the feed pipe.” Office Action, page 4. This statement contradicts the earlier statement in the Office Action, which confirmed that “Smith does not disclose the display device being removably mounted to the outside of the shield.” Office Action, page 3.

Because neither Smith nor McDonald, nor any other relevant prior art of record, singly or in combination, appear to teach or suggest the missing elements, in combination

they fail to render obvious the subject matter of independent claims 1 and 6. These claims are therefore allowable. Dependent claims 4 and 7 are allowable at least by virtue of their ultimate dependence from independent claims 1 and 6. Applicant respectfully requests reconsideration and withdrawal of these rejections.

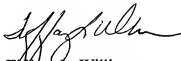
CONCLUSION

The amendments and the above remarks completely responded to the Office Action and place the application in condition for allowance, which is respectfully requested.

EXCEPT for the issue fees payable under 37 C.F.R. § 1.18, the Director is authorized by this paper to charge any additional fees during the entire pendency of this application, including fees due under 37 C.F.R. §§ 1.16 and 1.17 that may be required, including any required extension of time fees, or credit any overpayment to Deposit Account Number 11-0855. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

If there are any matters that can be addressed by telephone, the Examiner is respectfully urged to contact the undersigned attorney at 404-815-6608.

Respectfully submitted,



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